

7:30 AM	TUESDAY APRIL 12, 2005 - REGISTRATION	
8:15 AM	Welcome & Keynote 1: Bill Woessner, University of Montana — Viruses & Pharmaceuticals in Groundwater	
9:30 AM	Break	
9:45 AM	1A: GROUNDWATER-SURFACE WATER INTERACTIONS: CHEMISTRY, MODELS, AND REGULATIONS	1B: AQUIFER STORAGE AND RECOVERY
SESSION 1	<p>Logistic Regression Used to Relate Ground Water Quality to Man-Made and Natural Causes: <i>Sandy K. Williamson, U.S. Geological Survey</i></p> <p>Development and Applications of Groundwater Flow Model for the Dungeness River Area, Sequim, WA: <i>Thomas C. Goodlin, Tetra Tech EC, Inc.</i></p> <p>Using Numerical Models to Assess Storm-Water Infiltration Basins in Shallow Groundwater Settings: <i>Dawn M. Chapel, Pacific Groundwater Group</i></p> <p>Hydrogeology and Critical Aquifer Recharge Areas: <i>Laurie Morgan, WA Department of Ecology</i></p>	<p>Groundwater Storage Assessment and Beneficial Use of Class A Reclaimed Water in WRIA 14: <i>Steve Nelson, SLR International Corporation</i></p> <p>City of Walla Walla Aquifer Storage and Recovery Development: <i>Michael P. Klisch, Golder Associates Inc.</i></p> <p>Evaluating ASR Using Columbia River Water, Kennewick, Washington: <i>Steve J. Germiot, Aspect Consulting, LLC</i></p> <p>ASR and Buildout Applications of the Dungeness Groundwater Flow Model, Sequim, WA : <i>Ann C. Soule, Clallam County Environmental Health Services</i></p>
11:15 AM	Poster Session 1 - Groundwater Contamination and Remediation	
12:00 PM	LUNCH (provided) - Phil Mote, University of Washington, State Climatologist — Pacific Northwest Climate: Past, Present & Future	
1:30 PM	2A: POINT SOURCE CONTAMINANTS IN THE SUBSURFACE	2B: CHANGING CLIMATE, RETREATING GLACIERS, AND GROUNDWATER AVAILABILITY
SESSION 2	<p>Investigation of Casing Corrosion in Wells from the Hanford Nuclear Reservation, Richland, Washington: <i>Christopher F. Brown, Pacific Northwest National Laboratory</i></p> <p>Contaminant Ratios as a Key to Contaminant Sources and Histories in the Hanford 200 West Area: <i>Floyd N. Hodges, WA Department of Ecology</i></p> <p>Field Measurement of NAPL Volumes in the Vadose Zone by Partitioning Interwell Tracer Testing: <i>Richard E. Jackson, INTERA Inc.</i></p> <p>A Refined Conceptual Model for Dense Non-Aqueous Phase Liquids (DNAPL) in the Subsurface at the 200 West Area, Department of Energy Hanford Site: <i>Dawn Kaback, Concurrent Technologies Corporation</i></p>	<p>On the Continuing Retreat of South Cascade Glacier, Washington: <i>Edward G. Josberger, U.S. Geological Survey</i></p> <p>Implications of Global Warming on Water Availability: <i>Chris V. Pitre, Golder Associates Inc.</i></p> <p>Development of the Abbotsford-Sumas Aquifer Groundwater Flow Model for a Climate Change Impacts Study: <i>Diana Allen, Department of Earth Sciences, Simon Fraser University</i></p> <p>Glacier Shrinkage and Hydrological Effects: Diminishing Returns: <i>Andrew G. Fountain, Departments of Geology and Geography, Portland State University</i></p>
3:00 PM	Break	
3:30 PM	3A: REMEDIATION - I	3B: NON-POINT SOURCE CONTAMINATION
SESSION 3	<p>Pilot Testing of Permanganate Injection at Low Concentration to Restore a Solvent-Impacted Drinking Water Aquifer: <i>Dave Heffner, Aspect Consulting, LLC</i></p> <p>Use of Enhanced In-situ Reductive Dechlorination to Replace Pump and Treat at an Aerospace Manufacturing Facility in Tukwilla, Washington: <i>Clinton L. Jacob, Landau Associates</i></p> <p>A Tale of Two Barrier Walls: A Performance Comparison of Groundwater Containment Walls near Seattle, Washington: <i>John D. Long, Geomatrix Consultants, Inc.</i></p> <p>Steam-Enhanced Remediation of a Former Wood-Treating Facility at the Port of Ridgefield Lake River Industrial Site; Effects of Hydrostratigraphy on the Distribution of Heat and Mass Removal of Contaminants: <i>Eric Roth, Maul Foster & Alongi, Inc.</i></p> <p>Laboratory and Field Studies of Cr-Bioimmobilization in Groundwater at Hanford: <i>Terry C. Hazen, Lawrence Berkeley National Laboratory</i></p>	<p>Vadose Zone Nitrate Contamination, Malheur County, Oregon: <i>Paul F. Pedone, Natural Resources Conservation Service, USDA</i></p> <p>Pesticides in Surface Waters of the Pacific Northwest-Overview of USGS Regional Findings: <i>Sandy K. Williamson, U.S. Geological Survey</i></p> <p>Ground Water Nitrate Distributions and Denitrification in a Portion of the Abbotsford-Sumas Aquifer, Northwest Washington: <i>Robert Mitchell, Western Washington University, Geology Department</i></p> <p>Trace Metals Levels in Puget Sound Glacial Materials: <i>Lori J. Herman, Aspect Consulting, LLC</i></p> <p>Does Bacterial and Nitrate Contamination in Streams in Whatcom County, Washington, Come from Ground Water?: <i>Stephen E. Cox, U.S. Geological Survey</i></p>
5:20 PM	Break - Visit the Exhibitors	
6 - 9 PM	DINNER (provided) and Cash Bar at the Washington State History Museum	
7:30 AM	WEDNESDAY APRIL 13, 2005 - REGISTRATION	
8:00 AM	Keynote 2: Ileana Rhodes, Shell Global Solutions — Overview of Petroleum Hydrocarbon Chemistry and Environmental Forensics	
9:00 AM	Break	
9:30 AM	4A: DATA ANALYSIS AND EXCHANGE	4B: EFFECTS OF HETEROGENEITY
SESSION 4	<p>Pacific Northwest Water Quality Data Exchange: <i>Curtis Cude, Business Systems Development, Oregon Dept. of Environmental Quality</i></p> <p>An International Perspective on Maintaining Optimum Well Performance: <i>Jim S. Bailey, Golder Associates Inc.</i></p> <p>Trends in Uranium Plume Parameters, 300 Area, Hanford Site, Washington: <i>Christopher J. Murray, Pacific Northwest National Laboratory</i></p> <p>Groundwater Evaluation Methodology and Development of Concentration Limits for Landfills near Surface Water Bodies: <i>Bryan Graham, Tetra Tech EC, Inc.</i></p>	<p>Groundwater Flow Direction Anomaly Near Seattle's Union Station After the Nisqually Earthquake: <i>Brian Butler, Landau and Associates</i></p> <p>Layered Heterogeneity and its Effect on Technetium-99 Behavior in Variably Saturated Sediments: A Case Study of Hanford's 216-B-26 Trench: <i>Anderson L. Ward, Hydrology Technical Group, Pacific Northwest Laboratories</i></p> <p>Effect of Geology and Groundwater-Surface Water Interaction on Groundwater Flow and a Dissolved Chlorinated Solvent Plume in the Esperance Sand, Everett, Washington: <i>Mark P. Molinari, URS Corporation</i></p> <p>Effective Leak Detection — A Needed Component During Retrieval of High-Level Mixed Waste from Single Shell Tanks at the Hanford Site: <i>Joseph A. Caggiano, WA Department of Ecology</i></p>
11:00 AM	Poster Session 2 — Geohydrology and Watersheds	
12:00 PM	LUNCH (provided)	
1:30 PM	5A: CONTAMINANT FATE AND TRANSPORT STUDIES	5B: HYDROSTRATIGRAPHY
SESSION 5	<p>Ground Water Discharges of High pH and Chlorinated Hydrocarbons into the Hylebos Waterway, Tacoma, Washington: <i>Roy Jensen, Weston Solutions, Inc.</i></p> <p>The Impact of Stratigraphy and Geochemistry on Contaminant Fate Transport at the Boomsnub/Airco Superfund Site, Hazel Dell, Washington: <i>Glenn A. Hayman, EA Engineering, Science and Technology, Inc.</i></p> <p>Stable Isotopes of Strontium as Tracers of Seawater Intrusion and TCE: Case Studies from the Dominguez Gap (CA) and a Fractured Limestone Terrane (MO): <i>Richard W. Hurst, Hurst & Associates, Inc.</i></p> <p>Trace-Element Concentrations and Occurrence of Metallurgical Slag Particles in Bed Sediment Cores from Lake Roosevelt, Washington: <i>Stephen E. Cox, U.S. Geological Survey</i></p>	<p>Evaluation of the Nature of the Boundary between the Northern and Central Quito Aquifers, Quito, Ecuador: <i>Mark P. Ausburn, KOMEX</i></p> <p>Investigating Vertical Contaminant Distribution Using Innovative Methods: <i>Susan M. Narbutovskih, Pacific Northwest National Laboratory</i></p> <p>Identification of Leakage Effects During Site Characterization Investigations at the Potential Black Rock Reservoir Site: <i>Frank A. Spane, Pacific Northwest National Laboratory</i></p> <p>Three-Dimensional Geologic Model for the Washington Portion of the Spokane Valley-Rathdrum Prairie Aquifer: <i>James L. Poelstra, WA Department of Natural Resources, Geology & Earth Resources Division</i></p>
3:00 PM	Break	
3:30 PM	6A: WATERSHED MANAGEMENT PROBLEMS AND PLANS	6B: GROUNDWATER/SURFACE WATER - I
SESSION 6	<p>Oregon's Water Woes: Past and Present: <i>William N. Orr, University of Oregon</i></p> <p>Klamath Basin Rangeland Trust and the Irrigation Hydrology of Wood River Valley: <i>Charles T. Ellingson, Pacific Ground Water Group</i></p> <p>Des Moines Creek Basin — A Holistic Restoration Approach: <i>Zahid Khan, Des Moines Creek Basin Restoration Projects, King County Department of Natural Resources & Parks</i></p> <p>The Role of Ground-Water Hydrology in Resolving Water-Supply Issues in the Upper Klamath Basin, Oregon and California: <i>Marshall W. Gannett, U.S. Geological Survey</i></p>	<p>North Creek Stream Flow Enhancement: <i>Charles S. Lindsay, Associated Earth Sciences, Inc.</i></p> <p>Shallow Aquifer Response to Modifications in Columbia River Hydroelectric Management: <i>Fred Wurster, U.S. Fish and Wildlife Service, Division of Engineering/Water Resources</i></p> <p>Hydrogeologic Framework of Eastern Jefferson County, Washington: Implications For Surface Water-Ground Water Interactions: <i>F. William Simonds, U.S. Geological Survey</i></p> <p>Groundwater Contaminants Entering the Columbia River at the Hanford Site's 300 Area: <i>Gregory W. Patton, Pacific Northwest National Laboratory</i></p>
5:00 PM	Break	
5:30 - 8:30 PM	Dinner Cruise and Workshops	
7:30 AM	THURSDAY APRIL 14, 2005 - REGISTRATION	
8:00 AM	Keynote 3: Graham Fogg, UC Davis — Groundwater Vulnerability and the Meaning of Age Dates	
9:00 AM	7A: REMEDIATION - II	7B: GROUNDWATER/SURFACE WATER - II
SESSION 7	<p>Understanding and Treating a TCE Plume that Defies Conventional Wisdom: <i>Thomas C. Goodlin, Tetra Tech EC, Inc.</i></p> <p>Challenges in the Remediation of Groundwater Contaminated with Sr-90 in N-Area, Hanford Site, Washington: <i>Dibakar Goswami, WA Department of Ecology</i></p> <p>Environmental Tracer Investigation of Ground-Water Flow and TCE Migration beneath Fort Lewis, Washington: <i>Richard S. Dinicola, U.S. Geological Survey</i></p>	<p>Thermal Profiling of Long River Reaches to Characterize Ground-Water Discharge and Preferred Salmonid Habitat: <i>J.J. Vaccaro, U.S. Geological Survey</i></p> <p>Monitoring Groundwater Quality Along the Columbia River, Hanford Site, Washington: <i>Robert E. Peterson, Field Hygrology and Chemistry, Pacific Northwest National Laboratory</i></p> <p>A Decade of Regulatory Process to Reach Active Remediation, The Boeing Plant 2 Chlorinated Solvent Interim Action, Seattle, Washington: <i>Hideo Fujita, WA Department of Ecology</i></p>
10:25 AM	Break	
10:45 AM	8A: EMERGING CONTAMINANTS AND PUBLIC EXPOSURE	8B: GROUNDWATER MODELING
SESSION 8	<p>Mercury Emissions and Lake Deposition: A Qualitative Model and its Application to Lake Whatcom, Washington: <i>A. Paulson, U.S. Geological Survey</i></p> <p>Ground Water Investigations for Perchlorate in Washington and Oregon: <i>Kevin Broom, Weston Solutions, Inc.</i></p> <p>Volatile Organic Compounds in Soil Gas above a Ground Water Contaminant Plume at Fort Lewis, Washington: <i>Gregory W. Patton, Pacific Northwest National Laboratory</i></p>	<p>Investigating Near-Stream Groundwater / Surface Water Interactions Using MODFLOW-WHAT: <i>R. Brad Thoms, Oregon Graduate Institute, Department of Environmental and Biomolecular Systems</i></p> <p>Upland Basin Groundwater Models for Predicting Septic System Impacts and Land Use Planning: <i>Gary E. Andres, Land and Water Consulting, Inc.</i></p> <p>Hydrogeology Database Development and Ground-Water Modeling for the Palouse Basin Aquifer (PBA): <i>Joan Q. Wu, Washington State University, Department of Biological Systems Engineering</i></p>
11:45 AM	Closing Remarks and Door Prize Drawing	
12:00 PM	END OF SYMPOSIUM (Lunch provided with some workshops and field trips)	